

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/595,930
Source: IFWO
Date Processed by STIC: 03/07/2007

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 03/07/2007

PATENT APPLICATION: US/10/595,930

TIME: 09:25:52

Input Set : A:\sequence listing 237377.txt

Output Set: N:\CRF4\03072007\J595930.raw

```

3 <110> APPLICANT: Evotec NeuroSciences GmbH
5 <120> TITLE OF INVENTION: Diagnostic and therapeutic use of the human SGPL1 gene
6   and protein for neurodegenerative diseases
8 <130> FILE REFERENCE: 042347wo Me/FM
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/595,930
C--> 11 <141> CURRENT FILING DATE: 2006-05-19
13 <160> NUMBER OF SEQ ID NOS: 15
15 <170> SOFTWARE: PatentIn Ver. 2.1
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 568
19 <212> TYPE: PRT
20 <213> ORGANISM: Homo sapiens
22 <400> SEQUENCE: 1
23 Met Pro Ser Thr Asp Leu Leu Met Leu Lys Ala Phe Glu Pro Tyr Leu
24   1           5           10           15
26 Glu Ile Leu Glu Val Tyr Ser Thr Lys Ala Lys Asn Tyr Val Asn Gly
27           20           25           30
29 His Cys Thr Lys Tyr Glu Pro Trp Gln Leu Ile Ala Trp Ser Val Val
30           35           40           45
32 Trp Thr Leu Leu Ile Val Trp Gly Tyr Glu Phe Val Phe Gln Pro Glu
33   50           55           60
35 Ser Leu Trp Ser Arg Phe Lys Lys Lys Cys Phe Lys Leu Thr Arg Lys
36   65           70           75           80
38 Met Pro Ile Ile Gly Arg Lys Ile Gln Asp Lys Leu Asn Lys Thr Lys
39           85           90           95
41 Asp Asp Ile Ser Lys Asn Met Ser Phe Leu Lys Val Asp Lys Glu Tyr
42           100          105          110
44 Val Lys Ala Leu Pro Ser Gln Gly Leu Ser Ser Ser Ala Val Leu Glu
45           115          120          125
47 Lys Leu Lys Glu Tyr Ser Ser Met Asp Ala Phe Trp Gln Glu Gly Arg
48           130          135          140
50 Ala Ser Gly Thr Val Tyr Ser Gly Glu Glu Lys Leu Thr Glu Leu Leu
51 145           150          155          160
53 Val Lys Ala Tyr Gly Asp Phe Ala Trp Ser Asn Pro Leu His Pro Asp
54           165          170          175
56 Ile Phe Pro Gly Leu Arg Lys Ile Glu Ala Glu Ile Val Arg Ile Ala
57           180          185          190
59 Cys Ser Leu Phe Asn Gly Gly Pro Asp Ser Cys Gly Cys Val Thr Ser
60           195          200          205
62 Gly Gly Thr Glu Ser Ile Leu Met Ala Cys Lys Ala Tyr Arg Asp Leu
63           210          215          220
65 Ala Phe Glu Lys Gly Ile Lys Thr Pro Glu Ile Val Ala Pro Gln Ser
66 225          230          235          240

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/595,930

DATE: 03/07/2007

TIME: 09:25:52

Input Set : A:\sequence listing 237377.txt

Output Set: N:\CRF4\03072007\J595930.raw

```

68 Ala His Ala Ala Phe Asn Lys Ala Ala Ser Tyr Phe Gly Met Lys Ile
69                245                250                255
71 Val Arg Val Pro Leu Thr Lys Met Met Glu Val Asp Val Arg Ala Met
72                260                265                270
74 Arg Arg Ala Ile Ser Arg Asn Thr Ala Met Leu Val Cys Ser Thr Pro
75                275                280                285
77 Gln Phe Pro His Gly Val Ile Asp Pro Val Pro Glu Val Ala Lys Leu
78                290                295                300
80 Ala Val Lys Tyr Lys Ile Pro Leu His Val Asp Ala Cys Leu Gly Gly
81 305                310                315                320
83 Phe Leu Ile Val Phe Met Glu Lys Ala Gly Tyr Pro Leu Glu His Pro
84                325                330                335
86 Phe Asp Phe Arg Val Lys Gly Val Thr Ser Ile Ser Ala Asp Thr His
87                340                345                350
89 Lys Tyr Gly Tyr Ala Pro Lys Gly Ser Ser Leu Val Leu Tyr Ser Asp
90                355                360                365
92 Lys Lys Tyr Arg Asn Tyr Gln Phe Phe Val Asp Thr Asp Trp Gln Gly
93                370                375                380
95 Gly Ile Tyr Ala Ser Pro Thr Ile Ala Gly Ser Arg Pro Gly Gly Ile
96 385                390                395                400
98 Ser Ala Ala Ala Trp Ala Ala Leu Met His Phe Gly Glu Asn Gly Tyr
99                405                410                415
101 Val Glu Ala Thr Lys Gln Ile Ile Lys Thr Ala Arg Phe Leu Lys Ser
102                420                425                430
104 Glu Leu Glu Asn Ile Lys Gly Ile Phe Val Phe Gly Asn Pro Gln Leu
105                435                440                445
107 Ser Val Ile Ala Leu Gly Ser Arg Asp Phe Asp Ile Tyr Arg Leu Ser
108                450                455                460
110 Asn Leu Met Thr Ala Lys Gly Trp Asn Leu Asn Gln Leu Gln Phe Pro
111 465                470                475                480
113 Pro Ser Ile His Phe Cys Ile Thr Leu Leu His Ala Arg Lys Arg Val
114                485                490                495
116 Ala Ile Gln Phe Leu Lys Asp Ile Arg Glu Ser Val Thr Gln Ile Met
117                500                505                510
119 Lys Asn Pro Lys Ala Lys Thr Thr Gly Met Gly Ala Ile Tyr Gly Met
120                515                520                525
122 Ala Gln Thr Thr Val Asp Arg Asn Met Val Ala Glu Leu Ser Ser Val
123                530                535                540
125 Phe Leu Asp Ser Leu Tyr Ser Thr Asp Thr Val Thr Gln Gly Ser Gln
126 545                550                555                560
128 Met Asn Gly Ser Pro Lys Pro His
129                565
132 <210> SEQ ID NO: 2
133 <211> LENGTH: 5741
134 <212> TYPE: DNA
135 <213> ORGANISM: Artificial Sequence
137 <220> FEATURE:
138 <223> OTHER INFORMATION: Description of Artificial Sequence:nucleotide
139 sequence of human SGPL1 cDNA

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/595,930

DATE: 03/07/2007

TIME: 09:25:52

Input Set : A:\sequence listing 237377.txt

Output Set: N:\CRF4\03072007\J595930.raw

141 <400> SEQUENCE: 2

```

142 gcggtctgccg ggcctccaat ctccggcgccg gcggtcgccaa caggggagcc tgggtctcgc 60
143 ggcctgcgag tccgtcgcgt gctgaggag acgcaggagg tggagccggc cgggtgctcg 120
144 aggaaggag actggaagct ggttcggcg tgaggagagt ctgaaaaagg ggagcgcgga 180
145 gaggagctg gaagaggaag atgcctagca cagaccttct gatgttgaag gcctttgagc 240
146 cctacttaga gatttttgaa gtatactcca caaaagccaa gaattatgta aatggacatt 300
147 gcaccaagta tgagccctgg cagctaattg catggagtgt cgtgtggacc ctgctgatag 360
148 tctggggata tgagtttgtc ttccagccag agagtttatg gtcaaggttt aaaaagaaat 420
149 gttttaagct caccaggaag atgcccatta ttggctgtaa gattcaagac aagttgaaca 480
150 agaccaagga tgatattagc aagaacatgt cattcctgaa agtggacaaa gagtatgtga 540
151 aagctttacc ctcccagggt ctgagctcat ctgctgtttt ggagaaactt aaggagtaca 600
152 gctctatgga cgccttctgg caagagggga gagcctctgg aacagtgtac agtggggagg 660
153 agaagctcac tgagctcctt gtgaaggctt atggagattt tgcattggag aacccctgc 720
154 atccagatat ctcccagga ctacgcaaga tagaggcaga aattgtgagg atagcttgtt 780
155 cctgtttcaa tgggggacca gattcgtgtg gatgtgtgac ttctggggga acagaaagca 840
156 tactgatggc ctgcaaagca tatcgggatc tggcctttga gaaggggac aaaactccag 900
157 aaattgtggc tccccaaagt gcccatgctg catttaacaa agcagccagt tactttggga 960
158 tgaagattgt gcgggtccca ttgacgaaga tgatggaggt ggatgtgagg gcaatgagaa 1020
159 gaatatctc caggaacact gccatgctcg tctgttctac cccacagttt cctcatggtg 1080
160 taatagatcc tgtccctgaa gtggccaagc tggctgtcaa atacaaaata ccccttcatg 1140
161 tgcagccttg tctgggaggc ttctcatcgt tctttatgga gaaagcagga taccactgg 1200
162 agcaccatt tgatttcggg gtgaaagggt taaccagcat ttcagctgac acccataagt 1260
163 atggctatgc cccaaaaggc tcatcattgg tgttgtatag tgacaagaag tacaggaaact 1320
164 atcagttctt cgtcgataca gattggcagg gtggcatcta tgcttcccca accatcgcag 1380
165 gctcacggcc tgggtggcatt agcgcagcct gttgggctgc ctgatgcac ttcggtgaga 1440
166 acggctatgt tgaagctacc aaacagatca tcaaaactgc tcgcttctc aagtcagAAC 1500
167 tggaaaatat caaaggcatc tttgtttttg ggaatcccca attgtcagtc attgctctgg 1560
168 gatcccgatg ttttgacatc taccgactat caaacctgat gactgctaag ggggtggaact 1620
169 tgaaccagtt gcagttccca cccagtatcc atttctgcat cacattacta cagccccgga 1680
170 aacgagtagc tatacaattc ctaaaggaca ttcgagaatc tgtactcaa atcatgaaga 1740
171 atcctaaagc gaagaccaca ggaatgggtg ccatctatgg catggcccag acaactgttg 1800
172 acaggaatat ggttgagaa ttgtcctcag tcttcttgga cagcttgtag agcaccgaca 1860
173 ctgtcaccca gggcagccag atgaatggtt ctccaaaacc cactgaact tggacccttt 1920
174 ctagtctcaa ggggattcca gccttcagaa ggttcttggg atatggaaca ggccgtgcac 1980
175 aactttgaca tctggtcttg ctccatagag cacaactcaa gatagaccat gagacagctt 2040
176 gagcctcagg attcttggtc ttctctttat ctctcttttg tggtttttaa tttgaagacc 2100
177 ccagagaatt ccattacata atgattttgc cttgtttata aatgttacc taggaattgt 2160
178 ttttaaccatt tctttttcta aactctctag ctttcaactt tacttaaaca ttgtgtggta 2220
179 gctctgacct gtctgattc tttagagaag ctggggtaca gtttatgaga tagctagagc 2280
180 ttctttgtta tctcaggcag gaggcgttta cataacagat gtttctcag ctgggtgtga 2340
181 ggtatactct aagcaggagg ctttttcagc cttctctctc tttttttttt tttttttttt 2400
182 ttgagatgga attttgctct tttgccagc ctggagtga gtggcatgat ctgagctcac 2460
183 tgcaacctcc accactggg ttcaagcag tcttctgcct cagcctcccg agtagctggg 2520
184 attaccggca cccaccacca cgcctggcta atttttcaat tttctttttc agtagagacg 2580
185 ggttcaccgt gttggccagg ctggtcttga actcctgacc tcagggtgata cccgcccccc 2640
186 cgcctcagcc tcccaaagtg ctgggattac aggcgtgagc caccgtgcct ggccctgtct 2700
187 ctcttaagag taggttcatt gtctgtctta gagtcacttc tattgcaact cattttcttt 2760
188 ttccagggca cagatcgacc aagctgccgt tccctattct gcaggacagg actattctag 2820
189 catacctgct tcgtccaccc aggcagggtt tggggtggtc tcttctgtgc ctgcagtccc 2880

```

RAW SEQUENCE LISTING

DATE: 03/07/2007

PATENT APPLICATION: US/10/595,930

TIME: 09:25:52

Input Set : A:\sequence listing 237377.txt

Output Set: N:\CRF4\03072007\J595930.raw

```

190 catttgacac ttggttgcca ccatctttgg agattattgt ttggaatgat gcttccattg 2940
191 gctttttctt gttaccatgg actaggaaga aaacatgggt tccaaataat ctgggagctt 3000
192 ttggccatgg tgccgccttc ctgaattggc agtggtcaga gcacacctga accctatcct 3060
193 gggctggtga tgagcagaaa tcagaccttt ttctatgctt ttttgaatat cagagtagga 3120
194 tgaacaccca gattcaaata tgtcaccaaa gttggtggtg gtccttcctt gcaccttgc 3180
195 gttaagccat tatgtaatga aaatgtgttt gcttgaagga acagctcaaa gcaccttcac 3240
196 aagttgcctt gacttaccct aggtgggtgt gaaagagcac ccgtagcaag gaaaattttc 3300
197 tctattagtg tgttcttctg cctcttcccc cttgattcag ctttcagagg tactatggca 3360
198 gttttgcctc aggtgctgaa ctttctcag ccctggctaa aagggagcag cacagggaga 3420
199 gaaacaggat aggaaagcag aatggcgagc agcctatggc ccagggcctg taatcccttc 3480
200 ccaagactag ctgctcaggg tgggtgcaggg acaggaccag accctgcgcc tatttcttgc 3540
201 cttctttccc ctatagggaa ctctgtaggg tgagccactg tcctgctctt atgacattat 3600
202 atcttgtgcc tttctcctca gcagtgaagc gtgagctact cctggcccag gccctagggg 3660
203 aaatggatca gtctttgagg tttctatttg gggaggggag tacttaagat gagtcaaaag 3720
204 acactttcct ctgttccatt ccccatctca gggactcctg aatattcagc ctctccaggc 3780
205 tgggtgtctt tagtttcccc cactgggaat gctggctggg agagccatga ctaccagact 3840
206 tttcctcagg ctcttgggca tgttagtctg aattgttctt gagcactgta ctactgacct 3900
207 aacaactgtg actagctggc cagccattc agggctgggt tggcatttat gtgtgtgtgt 3960
208 gtgtgtgtgt gtttttctc tttgccagc agtgcattgt gggttccaag agtgggtagt 4020
209 gtgtgtatgt gtgtgtgtca gaggagagcc tggcaggcac ctctttgaga gtagctgtgg 4080
210 tcagagctgt ttggtcagt cttatgttg aatgaggtcc aggaaccag agccaccag 4140
211 cagacaccac tgtggcttgc cagctgccaa gatggagaag catgtgcccc tgtagagcgt 4200
212 ctccccagaa ccagaccccg agccactcgc ttctctgtg ctgtgacaac attggtgcca 4260
213 ggggagatgg tgtttttcaa agggacctac tgtagccact ttaatttaca attaagagcc 4320
214 ttagtttgac ttaacacttt ttagggcttt tcattgtgta tttttgtgta tgtgtgcata 4380
215 tagcagctac tctgtagcag aggtgggtag agacacttaa tagtatcatg tcgcatgcag 4440
216 atgtcacatc ggctctgca aaaactgtac tgtcttgttt ctgcattaga cttaagtagt 4500
217 catgtgaata tactgctatg tcacttttaa tattacgagt ttatacttg gaaaatggta 4560
218 cttgcttctt ttaaatctct gtcttctcta acctccccct tcccatttca atgctccctt 4620
219 cctaatttca gcaataatct caaaaagcaa ttaaatagtt aaatgaccct aattgtaatt 4680
220 actgtggatg gttgcattca tttgattact tgggcacaca cgagatgaca aatggggcag 4740
221 tggccatgct tgaatgggct cctggtgaga gattgcccc tgggtggtgaa acaatcgtgt 4800
222 gtgcccactg ataccaagac caatgaaaga gacacagtta agcagcaatc catctcattt 4860
223 ccaggcactt caataggtcg ctgattggtc cttgcaccag cagtggtagt cgtacctatt 4920
224 tcagagaggt ctgaaattca ggttcttagt ttgccaggga caggccctat cttatatattt 4980
225 tttccatctt catcatccac ttctgcttac agtttgctgc ttacaataac ttaatgatgg 5040
226 attgagttat ctgggtgggtc tctagccatc tgggcagtgt ggttctgtct aaccaaaggg 5100
227 cattggcctc aaaccctgca tttggtttag gggctaacag agctcctcag ataactttca 5160
228 cacacatgta actgctggag atcttattct attatgaata agaaacgaga agtttttcca 5220
229 aagtgttagt caggatctga aggtgtcat tcagataacc cagcttttcc ttttggcttt 5280
230 tagcccatc agactttgcc agagtcaagc caaggattgc ttttttgcta cagttttctg 5340
231 ccaaattggc tagttcctga gtacctggaa accagagaga aagaggatcc aggatgtact 5400
232 tggatgagga ggctggctt atctaggaag tcgtgtctgg ggtgcttatt gctgctccat 5460
233 acagctgtac gtcagcccc tggccttctc tgtaggttct tggcagcaat gagcagcttt 5520
234 cactcagtga cacaagtaat tactgagtc taatttgata gccaccaact gtacctgggt 5580
235 aggcaaagtc agatttttga gaacctttt cctgatttga agttttaatt acctattttt 5640
236 cttttatgct ttctctgtc ttgtaatctt ttctcttctt aatatccttc cctataattt 5700
237 caattatttg gattaatttt agaataaacc tattttatttc t 5741
240 <210> SEQ ID NO: 3

```

RAW SEQUENCE LISTING

DATE: 03/07/2007

PATENT APPLICATION: US/10/595,930

TIME: 09:25:52

Input Set : A:\sequence listing 237377.txt

Output Set: N:\CRF4\03072007\J595930.raw

241 <211> LENGTH: 1707

242 <212> TYPE: DNA

243 <213> ORGANISM: Homo sapiens

245 <400> SEQUENCE: 3

```

246 atgcctagca cagaccttct gatgttgaag gcctttgagc cctacttaga gattttggaa 60
247 gtataactcca caaaagccaa gaattatgta aatggacatt gcaccaagta tgagccctgg 120
248 cagctaattg catggagtgt cgtgtggacc ctgctgatag tctggggata tgagtttgtc 180
249 ttccagccag agagtttatg gtcaaggttt aaaaagaaat gttttaagct caccaggaag 240
250 atgcccatta ttggtcgtaa gattcaagac aagttgaaca agaccaagga tgatattagc 300
251 aagaacatgt cattcctgaa agtggacaaa gagtatgtga aagctttacc ctcccagggg 360
252 ctgagctcat ctgctgtttt ggagaaactt aaggagtaca gctctatgga cgccttctgg 420
253 caagagggga gagcctctgg aacagtgtac agtggggagg agaagctcac tgagctcctt 480
254 gtgaaggctt atggagattt tgcattggag aacccctgc atccagatat cttcccagga 540
255 ctacgcaaga tagaggcaga aattgtgagg atagcttgtt ccctgttcaa tgggggacca 600
256 gattcgtgtg gatgtgtgac ttctggggga acagaaagca tactgatggc ctgcaaagca 660
257 tatcgggatc tggcctttga gaaggggatc aaaactccag aaattgtggc tccccaaagt 720
258 gcccatgctg catttaacaa agcagccagt tactttggga tgaagattgt gcgggtccca 780
259 ttgacgaaga tgatggaggt ggatgtgcgg gcaatgagaa gagctatctc caggaacact 840
260 gccatgctcg tctgttctac cccacagttt cctcatggtg taatagatcc tgtccctgaa 900
261 gtggccaagc tggtgtgcaa atacaaaata ccccttcatg tcgacgcttg tctgggaggc 960
262 ttcctcatcg tctttatgga gaaagcagga taccactgg agcaccatt tgatttccgg 1020
263 gtgaaagggt taaccagcat ttcagctgac acccataagt atggctatgc cccaaaaggc 1080
264 tcatcattgg tgttgtatag tgacaagaag tacaggaact atcagttctt cgtcgatata 1140
265 gattggcagg gtggcatcta tgcttcccca accatcgag gctcacggcc tgggtggcatt 1200
266 agcgcagcct gttgggctgc cttgatgcac ttcggtgaga acggctatgt tgaagctacc 1260
267 aacagatca tcaaaactgc tcgcttctc aagtcagaa tggaaaatat caaaggcatc 1320
268 tttgtttttg ggaatcccca attgtcagtc attgctctgg gatcccgtga ttttgacatc 1380
269 taccgactat caaacctgat gactgctaag ggggtggaact tgaaccagtt gcagttccca 1440
270 cccagtattc atttctgcat cacattacta cagcccga aacgagtagc tatacaattc 1500
271 cttaaaggaca ttcgagaatc tgtactcaa atcatgaaga atcctaaagc gaagaccaca 1560
272 ggaatgggtg ccatctatgg catggcccag acaactgttg acaggaatat ggttcagaa 1620
273 ttgtcctcag tcttcttgga cagcttgtag agcaccgaca ctgtcaccga gggcagccag 1680
274 atgaatgggt ctccaaaacc cactga 1707

```

277 <210> SEQ ID NO: 4

278 <211> LENGTH: 21

279 <212> TYPE: DNA

280 <213> ORGANISM: Artificial Sequence

282 <220> FEATURE:

283 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the

284 human SGPL1 gene

286 <400> SEQUENCE: 4

287 tgccactga taccaagacc a

21

290 <210> SEQ ID NO: 5

291 <211> LENGTH: 21

292 <212> TYPE: DNA

293 <213> ORGANISM: Artificial Sequence

295 <220> FEATURE:

296 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the

297 human SGPL1 gene

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/595,930

DATE: 03/07/2007

TIME: 09:25:53

Input Set : A:\sequence listing 237377.txt

Output Set: N:\CRF4\03072007\J595930.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date